

REMARKS

Claims 7-10, 13-17, 21-23 and 51-56 remain in this application. Claim 7 has been amended to comply with requirements of form expressly set forth in the Office action, and claim 56 has been amended to correct minor clerical errors that do not touch on the merits of the case. Applicant respectfully requests entry of the foregoing amendments and reconsideration of this application.

Claim Objections

Claim 7 has been objected to because of minor informalities. In response to this objection, claim 7 has been amended in the manner suggested by the Patent Office. Accordingly, Applicant respectfully requests that the Patent Office enter the foregoing amendment and withdraw this objection.

Claim Rejections – 35 USC § 103(a)

Claims 7-10, 13-17, 21-23 and 51-56 have been rejected under 35 USC § 103(a) as allegedly being unpatentable over Sauer (US Patent No. 6,252,862) in view of Dalal (US Publication No. 2002/0093931). Claims 55 and 56 have been further rejected under 35 USC § 103(a) as allegedly being unpatentable over Sauer (US Patent No. 6,252,862) in view of Dalal (US Publication No. 2002/0093931), and further in view of Applicant's admitted prior art. Applicant respectfully traverses these rejections.

A wireless communications system generally includes a number of base stations (or access points) dispersed throughout a geographic region to provide an interface between a mobile device and a network infrastructure. The geographic region is divided into sub-regions known as cells with each base station assigned to a cell. As the mobile device travels along the boundaries of a cell, it may access the network infrastructure through multiple base stations. A frame selection function may be employed to select the frame with the best signal quality from the multiple base stations and forward the selected frame to the network infrastructure. This frame selection function may be performed in a base station or further upstream. Dalal is an example of a system having a frame selection function fixed in a base station.

Applicant discloses a novel and unobvious approach for handing off the frame selection function between base stations as the mobile moves from cell to cell. This may be achieved in a variety of ways. By way of example, when the wireless device moves away from a first base station towards a second base station, a selector entity may be used to facilitate the handoff of the frame selector function. Initially, the selector entity monitors the frame selection function at the first base station from frames it receives from the first and second base stations. As the handoff progresses, the selector entity eventually assumes the frame selection function. At the same time, the selector entity prompts the second base station to generate and propose frame selections. When the proposed frame selections are correct, the selector entity transfers the frame selection function to the second base station.

The Patent Office relies primarily on Sauer for disclosing the basic concept of a wireless communications system. The Patent Office then takes the position that Dalal teaches frame selection, and it would have been obvious to utilize frame selection in Sauer to provide improved transmission quality by selecting the highest quality frames. Without addressing the propriety of combining Sauer and Dalal, Applicant submits that the Patent Office has failed to establish a *prima facie* case of obviousness because the proposed combination of references would not yield the claimed invention.

Contrary to the position taken by the Patent Office, the claims require more than mere frame selection. The claims require a “selector entity” which facilitates handoff of the frame selection function between two base stations or access points. In claims 7, 10, 17 and 51, the selector entity monitors the frame selection function at the first base station from frames it receives from the first and second base stations.¹ In claims 55 and 56, the selector entity relays

¹ Independent claim 7 recites a selector entity which:

receives first communication device frames from the first access point, monitors frame selection by the first access point for the first communication device, informs a second access point to send frames received thereby

Independent claims 10, 17 and 51 each recite:

sending the selected frames to a selector entity . . . monitoring frame selection by the [first or selector base station] . . . informing a [second or substitute] base station to send frames received thereby to the selector entity

frames it receives from the second base station to the¹ first base station so that the first base station can continue the frame selection function during the initial handoff phase.²

Dalal discloses three base stations 101, 102 and 103 with the frame select function fixed in the first base station 101. As the mobile moves through the different cells, the frame selected by the frame selection function will change, however, the frame selection function will always remain in the first base station 101. It will never be handed off. The methodology claimed by Applicant to effect a handoff from one base station to another is not disclosed or suggested required by Dalal.

² Independent claim 55 recites a selector entity which:

informs a second access point to send frames received thereby . . . receives information frames from the second access point . . . relays the information frames received from the second access point to the first access point for continued frame selection at the first access point . . .

Independent claim 56 recites

informing a second base station to send frames received thereby . . . receiving information frames from the second base station . . . relaying the information frames received from the second base station to the first base station for continued frame selection at the base station . . .

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicant submits that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: 3/15/2004

By: *Sandra L. Godsey*
Sandra L. Godsey, Reg. No. 42,589
(858) 651-4517

QUALCOMM Incorporated
5775 Morehouse Drive
San Diego, California 92121
Telephone: (858) 651-4125
Facsimile: (858) 658-2502